
CURRICULUM VITAE DR. IR. GILLIAN SAUNDERS-SMITS

Dr. Ir. Gillian Nicola Saunders-Smits
Faculty of Mechanical Engineering
Cognitive Robotics Department, Robot Dynamics
Mekelweg 2, 2628 CD Delft, The Netherlands
Email: G.N.Saunders@tudelft.nl
Website: www.gilliansaunders.nl

phone: +31 15 2785369
mobile: +31 6 14189474



KEY COMPETENCES

Knowledgeable, Educational Leader, Helicopter View, Good analyzer, Good organizer, Passionate Lecturer, Networker

RESEARCH INTERESTS

Transversal Skills and Preparation for Labour Market, Curriculum Development and Evaluation, Teaching Innovations, Online Education and Life-Long Learning

CURRENT POSITION (SINCE 2023)

Senior Lecturer/Associate Professor, Robot Dynamics Group, Cognitive Robotics Department, Faculty of Mechanical Engineering, Delft University of Technology.

EDUCATION

2008 - PhD in Aerospace Engineering Education - *Study of Delft Aerospace Alumni*: A study into the professional success of the alumni of the Faculty of Aerospace Engineering and how the aerospace curriculum contributed to this success and what changes to the curriculum should be made. PhD Supervisors: Prof. Dr. Z. Gürdal & Prof. Dr. E. de Graaff

2005 - TU Delft University Teaching Qualification (UTQ/BKO) – 400h. BKO/UTQ is the post-graduate certificate in higher education teaching within Delft University of Technology as mandated by Dutch Law.

1998 - MSc in Aerospace Engineering, Chair of Aerospace Structures and Computational Mechanics, Faculty of Aerospace Engineering, Delft University of Technology. Supervisor: prof. dr. J. Arbocz.

ACADEMIC EMPLOYMENT HISTORY

- 2020 – 2022:** Visiting Associate Professor at Leiden-Delft-Erasmus Centre for Education and Learning, the Netherlands.
- 2016 - 2022:** Senior Lecturer/Associate Professor, Aerospace Structures & Materials Department.
- 2001- 2016:** Lecturer/Assistant Professor, Aerospace Structures & Computational Mechanics Group.
- 1999 - 2001:** Lecturer/Assistant Professor in Aircraft Performance and Propulsion Group
- 1999:** Researcher Aerospace Structures & Computational Mechanics Group, *All at Faculty of Aerospace Engineering, Delft University of Technology, the Netherlands.*

INDUSTRY EMPLOYMENT

- 1998 – 1999** Facilities Manager, Shell Exploration and Production B.V., The Hague, The Netherlands.

TEACHING (present)

UNDERGRADUATE COURSES

- Mechanical Engineering design project 1st year BSc ME (WOP1), project tutor, since 2022
- Mechanical Engineering design project 1st year BSc ME (WOP2), project tutor, since 2022
- Statics, 1st year ME, tutor, since 2023
- Honours Programme in Next Generation Robotics (NGR) for excellent bachelor students, coordinator and tutor, since 2022

GRADUATE COURSES

- RO47007 Multi-Disciplinary Project Robotics since 2023, lecturer

ONLINE COURSES & OPENCOUREWARE

- [Let's Innovate Assessment!](#) Part of open European E-course [Let's get Flipped](#) for Lecturers within the Erasmus+ Rapide Project since 2022.
- Using Peer Assessment in Inclusive Digital Education - Workshop to help lecturers design their own Peer Assessment in their course – [4TU/CEE Innovation Map](#) since 2023
- MOOC on Multidisciplinary Research Methods for Engineers on [edX](#), since 2021. Also available on [OCW](#).
- Curriculum Elements to develop transversal skills in engineering students, [OCW](#) published as part of [PREFER](#) Project
- MOOC Introduction to Aerospace Structures & Materials on [edX](#), since 2018. Also available on [OCW](#).
- Mini-MOOC [Bachelor Aerospace Engineering](#), since 2021
- Research Methodologies, online course also available on [Open Courseware](#), 2013-2021

SUPERVISION & EXAMINER

- PhD Supervision: Lydia Kes on Competency Assessment within Aviation Maintenance Basic Training within the ICAO framework
- External Examiner for Engineering, Physics and Social Sciences by the Government of Denmark (CENSOR network) since 2017
- External Subject Examiner, Aerospace Engineering Queen's University Belfast, 2021-2025

TEACHING (past)

UNDERGRADUATE COURSES

- Introduction to Aerospace Engineering part I, Lecturer, 2020-2021
- Statics for 1st year BSc students, Lecturer and Course Coordinator, 2004-2015
- Mechanics of Materials for 1st year BSc students, Lecturer and Course Coordinator, 2001-2009 and 2011-2014
- Aerospace Structures Design Project for 1st year BSc students, Lecturer and Course Coordinator, 2001-2008
- Aerospace Structural Design Project for 2nd year BSc students, Lecturer and Course Coordinator, 2001-2009
- Aerospace Flight & Orbital Mechanics and Computer Programming Project for 2nd year BSc students, Lecturer and Course Coordinator, 2001-2009
- Computer-Aided Design using AutoCAD, for 1st year BSc students, Lecturer and Course Coordinator, 2006
- Airplane Performance I for 1st year BSc students, Lecturer, 1999-2001
- Airplane Performance II for 2nd year BSc students, Lecturer, 1999-2001
- Introduction into Aerospace Engineering for 1st year BSc students, Lecturer, 1999-2001
- Tutor Design Synthesis Exercise for Final year BSc students, 2001-2012

GRADUATE COURSES

- Research Methodologies for MSc & PhD students, Lecturer and Course Coordinator, 2010-2021
- Industry Best Practices in Structures & Materials for MSc students, 2014-2016
- Interdisciplinary CDIO Bootcamp for MSc & PhD students, 2018-2019
- Ethics & Engineering for Aerospace Engineering for MSC students, Facilitator, 2020-2021

COURSES ON EDUCATION FOR TAs AND STAFF

- Being a Teaching Assistant in Mechanics for students, 2002-2015
- Being a Teaching Assistant tutoring Design Projects for students, 2005 - 2010
- Being a Tutor in the Design Synthesis Exercise for PhDs and Staff, 2010 -2014

SUPERVISION & EXAMINER

- Over 100 Bachelor students in their final thesis group design projects in Aerospace Engineering
- Several MSc students in Structures and/or Education
- PhD students supervision:
 - Mariana Leandro Cruz, (2017-2021) Measurement and Practice of Transversal Competencies in Engineering Education – Evaluations of Perceptions and Stimulation of Reflections of industry, lecturers, and students – Awarded 20 December 2021
- External Examiner in MSc and PhD examinations within TU Delft, Denmark, the United Kingdom, and Australia

LEADERSHIP

- Chair Accreditation Committee Bachelor Military Systems & Technology, Netherlands Defense Academy, 2023
- Co-founder PhD & Post-doc Network on Education Coordinator at TU Delft: encouraging cooperation and intervision among early career researchers in education at TU Delft, 2018-2020
- Master Track Coordinator Aerospace Structures and Materials Track: responsible for the curriculum of the MSc track as well as the progress and monitoring of its 200+ MSc students, 2012-2018
- Member Education Management Team Aerospace Department tasked with Online Education, 2016
- Faculty Coordinator Online Education Aerospace Engineering responsible for setting up and implementing online education at Aerospace Engineering, 2013-2016
- Project leader Curriculum Innovation of MSc Track Program Aerospace Structures and Materials, 2013 - 2015
- Project Education Coordinator and Chairperson of the Project Education Coordination Committee, 2000 – 2009

ACHIEVEMENTS

AWARDS

- [Extension School Ambassador for Open Education Award 2022](#), awarded March 2022, TU Delft
- [Finalist](#) Edx Prize 2021 for Introduction to Aerospace Structures & Materials MOOC
- Educational Hero – included in [TU Delft Wall of Fame](#) at Teaching Academy, November 2021, TU Delft
- Member of Merit – TU Delft Staff Association Prometheus, awarded June 2021
- Best Research Paper award – 48th SEFI Annual Conference, Twente, the Netherlands, 2020
- Finalist 2019 SEFI Maffioli Award for Aerospace Online Education
- Best Paper award – 39th SEFI annual conference, Lisbon, Portugal, 2011
- Part of winning team of the “Universiteitsfonds - Ritsema van Eck prize” for excellent teamwork in organising the Design Synthesis Exercise, 2003

GRANTS

RAPIDE - EU Erasmus+ Strategic Alliance on Relevant assessment and pedagogies for inclusive digital education in collaboration with University of Zagreb - Croatia, Goethe University - Germany, the Open University - UK, and the University of Rijeka – Croatia, 2021-2023, € 219,085.

PREFER - EU Erasmus+ Knowledge Alliance on Professional Roles and Employability of Future Engineers in collaboration with KU Leuven, Dublin Institute of Technology, Siemens, Engie, ESB, KIVI, IE-net, Engineers Ireland, Agoria, and FEANI, funded by the European Commission, 2016 -2020, €988,462.

ASM MOOC on edX - Development of Massive Open Online Course and Open Courseware Textbook in Introduction into Aerospace Structures & Materials, funded by Extension School TU Delft, 2017-2018, €25,000.

Online MSc Courses in Aerospace Engineering – Follow up Pilot project to investigate the feasibility of expanding of paid online credit-giving courses at TU Delft, funded by TU Delft 2014-2015, €100,000.

Online MSc Courses in Aerospace Structures – Pilot project to investigate the feasibility of paid online credit-giving courses at TU Delft, funded by TU Delft 2013-2014, €100,000.

WO Sprint project Master Thesis - A project aimed at enhancing the efficiency and success of MSc students during their final thesis at the Faculties of Aerospace Engineering and Technology, Policy and Management of Delft University of Technology as part of the WO Sprint initiative funded by Platform Bèatechniek, 2010 - 2012, €85,000.

SURF Onderwijs Vernieuwings Project PROOF (Peer Review Online – Scaling up and Facilitating) on the use of Peer and Self-evaluation in writing and group work in conjunction with Universiteit Utrecht, Vrije Universiteit Amsterdam and the Faculty of Technology, Policy and Management at Delft University of Technology, funded by SURF, 2007-2009, € 294,100.

SERVICE

WITHIN TU DELFT

- Member of the Education Advisory Board, TU Delft Extension School for Continuing Education appointed by the university's Executive Board, since 2021
- Member of Lifelong Learning Working Group for the TU Delft Executive Board, 2021-2023
- Member Work's Council, 2015 – 2016
- Member of the 3rd year BSc Design Synthesis Exercise Coordination Committee, responsible for scheduling, grading and the training of all new tutors and coaches, 2001-2015
- Coordinator International Design Exercises with Queen's University Belfast and RMIT Melbourne, 2003-2009
- Board of Studies Aerospace Engineering– education advisory council of students and staff to the dean, 2010-2014
- Bachelor Curriculum Innovation Skills Committee, 2007-2009
- Bologna Agreement Implementation Committee - Advising director of education on implementation of separate BSc and MSc degrees with a BSc degree becoming a set entry requirement for the MSc and its consequences for students, 2007-2009
- Bridging Program Design for University of Applied Sciences students, 2004-2005
- Implementation of New Educational Methods Committee, 2004-2005
- Re-Evaluation CAD software committee, 2004-2005
- BSc development Minor Committee member on Earth & Planetary Observation Technology, 2005
- Blackboard Coordinator Faculty of Aerospace Engineering, 2000-2004
- Representative for Aerospace Engineering in ICT in Education platform of TU Delft (ICTO), 2000-2002
- Chairperson Air- & Spacecraft Collection Committee Faculty of Aerospace Engineering, 2000-2004

EXTERNAL

- Chair & Member of Accreditation Panels for Aerospace for Engineers Ireland, 2019 and 2021
- Member Editorial Board Journal of Teaching Engineering, since 2021
- Member Editorial Board International Journal of Technology and Design Education, since 2023
- Mentor in Safety Champions in Engineering Education Programme run by University College London and NMITE for the Royal Academy of Engineering and Lloyds Register Foundation, 2021
- Member SEFI Board of Directors, 2019-2022
- Member Scientific Committee 2nd International Conference on Science and Technology Education, October 2021, Porto, Portugal, 2020-2021
- Member Scientific Committee 1st International Conference on Science and Technology Education, October 2020, Porto, Portugal, 2019-2020
- External Advisor to SEFI Steering Committee, 2017-2019
- National Correspondent for the Netherlands for SEFI, the European Society for Engineering Education, 2013- 2019
- Reviewer for European Journal of Engineering Education, since 2007
- Reviewer for International Journal for Design & Technology, since 2017
- Reviewer for Journal of Engineering Education, since 2019
- Reviewer for IEEE Transaction on Education, since 2020
- Reviewer for Journal of Teaching Engineering, since 2021
- Reviewer for Humanities and Social Science Communications (Nature), since 2023
- Reviewer SEFI Annual Conference, since 2011
- Reviewer ASEE Annual Conference, since 2018
- Guest Editor Special Issue: Best papers from the SEFI 37th Annual Conference in 2009, European Journal for Engineering Education, Vol. 35, Issue 4, August 2010
- Editor proceedings SEFI 37th Annual Conference, 2009
- Organizer SEFI annual conference, Rotterdam, 2009
- Organizer Active Learning in Engineering Education, ALE 2005, Annual Conference, 2005

OTHER QUALIFICATIONS

EDUCATION COURSES

- Introduction Class and Workshop Universal Design for Learning by UDL Academy – March 2023
- Using Miro boards in Workshops by Peter Schwöbel Coaching & Training - 2021
- TU Delft UTQ module on Supervising Individual Students – 2016
- TU Delft UTQ Module on Advanced Assessment – 2015
- TU Delft UTQ Module on Designing and Teaching an online Course – 2014
- Masterclass Interactive Teaching by Eric Mazur from Harvard University - 2011
- TU Delft Workshop Plagiarism and Prevention - 2010
- TU Delft Workshop “aansluiting VWO”(transition High School – University) - 2010
- TU Delft E-learning Workshop - 2008
- TU Delft Active Learning Workshop by Dr. Mark Somerville from Olin College - 2008
- TU Delft Storylines workshop – Masterclass on theatre skills in education - 2007
- TU Delft Course for Tutors of the Design Synthesis Exercise - 2003
- TU Delft Course in Designing and Correcting of exams - 2000
- TU Delft Course Starting lecturers - 2000
- Improving English Medium Instruction in an Engineering Education context- 1999

LEADERSHIP COURSES

- Coaching Leadership Course – internal leadership course offered by TU Delft, December 2010 – June 2011

MEDIA COURSES

- Camera Training – New Media Centre TU Delft –2015

- Media and Interview Training – Communications Department TU Delft – 2014
- Social Network Training – Library TU Delft – 2011, 2014

EXTERNAL ONLINE COURSES

- MOOCs on *Overview of Creating an EdX Course* - 2017
- MOOC *Creating Video for the EdX Platform*, - 2017
- MOOC *StudioX, creating a Course with edX* – 2018
- MOOC on *Introduction to Composites* by University of Washington
- MOOC on *Aircraft Accident Investigation* by Embry Riddle

PROFESSIONAL MEMBERSHIPS AND NETWORKS

- KIVI (Royal Institute for Engineers)
- SEFI (European Society for Engineering Education)
- ASEE (American Society for Engineering Education)
- UK&IE EERN (UK & Ireland Engineering Education Research Network)

SKILLS

- Languages: Dutch (mother tongue), English (fluent), German (Fair), French (Fair)
- Training Skills: Holder of Presenting, Facilitating, Skills instructing and Course Director qualifications of the UK Scout Association.
- Computer Skills: SPSS, Jamovi, MS Teams, Office365, Möbius, Camtasia (video editing)
- Digital Skills: Basic Programming, XML, CAD and FEM skills.
- Hobbies: Aviation & History, Art & Design, Yoga, Family Holidays and (Pub)Quizzes – I was a participant in the TV Programmes: “*de Slimste Mens vs. De Rest*” in 2017 and in “*Beat the Champions*” in 2022.

VOLUNTARY WORK & OUTREACH

- Volunteer for “*Spiegelbeeld*” – initiative by Dutch Women in Engineering Association (VHTO) to increase number of girls choosing a career in Science, Technology, Engineering and Maths (STEM)
- Member of Local Sounding Board for the Emerald Estate in Delfgauw to advice the Pijnacker-Nootdorp council on the implementation of their new recycling scheme, 2016-2019
- Board Member TU Delft Staff Association Prometheus, 2017-2021
- Have in the past volunteered for more than 10 years as Youth leader in both Dutch and British Scouting Association. Also served as Member of Parent Committee and Central Parenting Council of “*Octopus Kinderopvang - nurseries*” in Delft from 2007 – 2011 and Parent-Teacher Association Primary School Eglantier Tanthof Delft (2011 – 2015).

REFERENCES

Available upon request

PUBLICATIONS

BOOKS

Saunders-Smits, G.N., Melkert, J.A., and Schuurman, M.J., (2020). *“80 Years of Aerospace Engineering Education in the Netherlands”*, ISBN 9789463663380, TU Delft Open, the Netherlands
DOI:10.34641/mg.12

De Graaff, E., Saunders-Smits, G.N., and Nieweg, M.R., editors, (2005). *“Research and practice of Active Learning in Engineering Education”*, ISBN 978 90 8555 091 2, Amsterdam University Press, Amsterdam

JOURNAL ARTICLES

Rienties, B., Divjak, B., Eichhorn, M., Iniesto, F., Saunders-Smits, G.N., Svetec, B., Tillman, A., and Zizak, M. (2023). “Online professional development across institutions and borders”, in *International Journal Education Technology in Higher Education*, 20, 30. DOI: 10.1186/s41239-023-00399-1

Van Helden, G., van der Werf, V., Saunders-Smits, G.N., and Specht, M.M., (2023). “The Use of Digital Peer Assessment in Higher Education – an Umbrella Review of Literature”, in *IEEE Access*, DOI: 10.1109/ACCESS.2023.3252914.

Saunders-Smits, G.N., (2021). *“Interview: Ir. Koo Siu Ling – In conversation with the first female graduate of LR, TU Delft”*, Leonardo Times, Year 25, Number 2, Summer 2021, pp. 14 – 17, ISSN 2352-7021 (Non-reviewed Journal)

Leandro Cruz, M., and Saunders-Smits, G.N.,(2021). “Exploring the effectiveness and the transversal competency retention of a game-based learning activity one year after student participation”, *Journal on Teaching Engineering*, 1:1 (2021) 94-112. DOI: 10.24840/2795-4005_001.001_0004

Saunders-Smits, G.N., Craps, S., Carthy, D., and Langie, G., (2021). “Comparison of 1st-year student conceptions of their future roles as engineers between Belgium, Ireland, and the Netherlands”, *International Journal for Mechanical Engineering Education*. DOI: 10.1177/03064190211027135

Leandro Cruz, M., Sá, S., Mesquita, D., Lima, R.M., Saunders-Smits, G.N., (2021). “The effectiveness of a simple tool to practice communication skills: A case study across five European Engineering Universities”, *International Journal for Mechanical Engineering Education*. DOI: 10.1177/03064190211014458

Leandro Cruz, M., and Saunders-Smits, G.N., (2021). “Using an industry instrument to improve the transversal competency learning outcomes of engineering graduates”, *European Journal of Engineering Education*. DOI: 10.1080/03043797.2021.1909539

Leandro Cruz, M., van den Bogaard, M.E.D., Saunders-Smits, G.N., and Groen, P., (2021). “Testing the Validity and Reliability of an Instrument Measuring Engineering Students - Perceptions of Transversal Competency Levels”. *IEEE Transaction on Education*, Vol. 64, no. 2, pp. 180-186, DOI: 10.1109/TE.2020.3025378

Leandro Cruz, M., Saunders-Smits, G.N., and Groen, P., (2020). “Evaluation of competency methods in engineering education: a systematic review”, *European Journal of Engineering Education*, Vol 45, Issue 5 pp 729-757, DOI: 10.1080/03043797.2019.1671810

Cervone, A., Melkert, J.A., Mebus, L.F.M., and Saunders-Smits, G.N., (2016). “Push or Pull Students into Blended Education: A Case Study at Delft University of Technology”. *International Journal of Engineering Education*, 01/2016; 32(5(A)):1911-1921.

Saunders-Smits, G.N., and de Graaff, E., (2010). “Assessment of curriculum quality through alumni research”, *European Journal of Engineering Education*, Vol. 37(2), p133-142, 2012.
DOI:10.1080/03043797.2012.665847

BOOK CHAPTERS

Brügemann, V.P., Brummelen, H. van, Melkert, J.A., Kamp, A., Reith, B.A., Saunders-Smits, G.N., and Zandbergen, B.T.C., (2005) "An example of active learning in Aerospace Engineering", in *Research and Practice of Active Learning in Engineering Education*, Editors: E. de Graaff, G.N. Saunders-Smits, and M.R. Nieweg, ISBN 978 90 8555 091 2, Amsterdam University Press, Amsterdam, pp. 156-164

KEYNOTES

"What type of Engineer are you and do you have the right skills? – sharing the outcomes of the PREFER Project". Keynote speech at BEST Virtual Summit, 16 June 2020

"The Skills Gap in Engineering Graduates: Fiction or Reality? - A call for Research-based Intervention on Closing the Gap". Keynote speech at the UK & Ireland Engineering Education Research Network meeting, November 2016, York

"Engineering Engineering Education", Keynote Speech at ETALEE 2015: Exploring Teaching for Active Learning in Engineering Education, DTU, Copenhagen, Denmark, November 2015. DOI: 10.13140/RG.2.1.3113.9442

"Attracting young people to engineering" and Keynote Speech and Member of keynote debate panel at 37th annual SEFI conference: Attracting Young People to Engineering, Rotterdam, 2009

INVITED CONTRIBUTIONS & PRESENTATIONS

"Developing a Typology within the Internship Landscape in Engineering Education: An Initial Comparative Study", Saunders-Smits, G.N., and van den Bogaard, M.E.D., presentation at the UK&IE Engineering Education Research Network Annual Symposium, University of Warwick, Coventry, United Kingdom, 1-2 June 2023.

"The Assessment of Transversal Competencies in Aviation Maintenance Training", Kes, L., Saunders-Smits, G.N., and Specht, M.M., presentation at the UK&IE Engineering Education Research Network Annual Symposium, University of Warwick, Coventry, United Kingdom, 1-2 June 2023.

The effectiveness of a simple tool to practice communication skills: A case study across five European Engineering Universities, Leandro Cruz, M., Sá, S., Mesquita, D., Lima, R.M., Saunders-Smits, G.N., presentation at 1st International Conference for Science and Technology Education, Porto, Portugal, 15-16 October 2020

Comparison of 1st-year student conceptions of their future roles as engineers between Belgium, Ireland and the Netherlands, Saunders-Smits, G.N., Craps, S., Carthy, D., and Langie, G., presentation at 1st International Conference for Science and Technology Education, Porto, Portugal, 15-16 October 2020

"Online Teaching can be more than Talking Heads – Materials Experiments in a MOOC" invited presentation at the Ansys Granta Online Materials Education Symposium, 3 September 2020

"Webinar Oral Exam and Brightspace Discussions and Analytics" – part of TU Delft's Remote Teaching Webinar series, 10 June 2020

"Transversal skills - How do we prepare our students for the future labour market?" Meet & Eat presentation at TU Delft Teaching Lab, 26 November 2019

"The Invisibles and their Diversity", Video presentation at European Convention for Engineering Deans, Trondheim, Norway, 05/2018. <https://youtu.be/IBg063-AqtI>

"The Use of Online Tools in Student – Lecturer Communications". Invited speech at Frans-Nederlandse Ontmoetingsdagen voor het Hoger Onderwijs, Lille, France, 06/2014

"Van OpenCourseWare naar Online Onderwijs" - invited presentation on SURF Onderwijsdagen, 13 November 2012, Rotterdam, the Netherlands, with S. Dopper. (Presentation on online education at SURF Education days)

"The use of Teaching Assistants in Project Education - 10 years of Experiences at TU Delft", invited speaker at LESEC annual event, 8 February 2011, Leuven, Belgium

“Peer Review versie 3: Teamprestaties meten, volgen, toetsen”, invited presentation at SURF Onderwijsdagen, 8 November 2011, Utrecht in cooperation with Parantion. (Presentation on the use of peer review in project education at SURF Education days)

“Peer evaluatie: dé manier om van elkaar iets te leren”, invited presentation on SURF Onderwijsdagen, 9 November 2010, Utrecht in cooperation with Parantion (Presentation on use of peer review in project education at SURF Education days)

CONFERENCE PAPERS

2023

Van der Niet, A.M., Claij, C.C., and Saunders-Smits, G.N. (2023). *“Educating future Robotics Engineers in Multidisciplinary Approaches in Robot Software Design”*, 51st Annual SEFI Conference, 10-14 Sept 2023, Dublin, Ireland. DOI: 10.21427/W6WB-Z113

Saunders-Smits, G.N., Bossen, R.C., and de Winter, J.C.F. (2023). *“From curriculum to career: Analysing the contribution of Delft University’s Robotics MSc Programme to the career path of its alumni”*, 51st Annual SEFI Conference, 10-14 Sept 2023, Dublin, Ireland. DOI: 10.21427/3VA6-M479

Van der Werf, V., van Helden, G., Schleiss, J., and Saunders-Smits, G.N. (2023). *“A Framework for Investigating Educational Theories in Engineering Education Research”*, 51st Annual SEFI Conference, 10-14 Sept 2023, Dublin, Ireland. DOI: 10.21427/PM7V-MD26

Wint, N., Saunders-Smits, G.N., and Penlington, R. (2023). *“Supporting Engineering Students with Disabilities: Promoting Awareness and Sharing Good Practices”*, 51st Annual SEFI Conference, 10-14 Sept 2023, Dublin, Ireland. DOI: 10.21427/CCH3-GY21

2022

Saunders-Smits G.N., (2022). *“The Future of Women Aerospace Engineers in Academia – a numbers game”*, 50th SEFI Annual Conference, 19-22 Sep 2022, Barcelona, Spain. DOI: 10.5821/conference-9788412322262.1205

Saunders-Smits, G.N., van Helden, G., van der Werf, V., and Specht, M.M., (2022). *“Using Peer Assessment in Inclusive Digital Education”*, 50th SEFI Annual Conference, 19-22 Sep 2022, Barcelona, Spain. DOI: 10.5821/conference-9788412322262.1369

2021

Jivet, I., and Saunders-Smits G.N., (2021). *“The Effect of the COVID-19 Pandemic on a MOOC in Aerospace Structures and Materials”*, 49th SEFI Annual Conference, 13-16 Sep 2021, Berlin, Germany

2020

Saunders-Smits, G. N., and Leandro Cruz, M., (2020). *Towards a Typology in Literature Studies & Reviews in Engineering Education Research*, 48th SEFI Annual Conference, 20-24 Sep 2020, Twente, the Netherlands – *Winner of best paper award*

Saunders-Smits, G.N., Melkert, J.A., and Schuurman, M.J., (2020). *80 Years of Aerospace Engineering Education in the Netherlands*, AIAA SciTech 2020 Forum: American Institute of Aeronautics and Astronautics Inc. (AIAA), p. 1-19 19 p. AIAA 2020-0643. 6-10 Jan 2020, Orlando, Florida, USA. DOI: 10.2514/6.2020-0643

Saunders-Smits, G.N., Rans, C.D., Teuwen, J.J.E., Sinke, J., Alderliesten, R.C., and van Valkenburg, W.F., (2020). *Teaching Aerospace Structures and Materials to the World: Analysis of the edX MOOC Introduction to Aerospace Structures and Materials*, AIAA SciTech 2020 Forum: American Institute of Aeronautics and Astronautics Inc. (AIAA), 10 p. AIAA 2020-0326. 6-10 Jan 2020, Orlando, Florida, USA. DOI: 10.2514/6.2020-0326

2019

Leandro Cruz, M. and Saunders-Smiths, G. N., (2019). *“Transversal Competency Level of Engineering Graduates Dictated by European Industry”*, ASEE 2019 126th Annual Conference and Exposition, 16-19 June 2019, Tampa, Florida, USA. DOI: 10.18260/1-2--33464

2018

Leandro Cruz, M., and Saunders-Smiths, G. N., (2018). *“Pilot study boot camp: professional engineering roles experienced in a week”*, 6th Annual Symposium of the United Kingdom & Ireland Engineering Education Research Network, 1-2 Nov 2018, University of Portsmouth, United Kingdom.

Leandro Cruz, M., and Saunders-Smiths, G.N., (2018). *“Design and Implementation of New Communication and Lifelong Learning Elements in a Master Engineering Course”*. 46th SEFI Annual Conference, 17-21 Sept 2018, Copenhagen, Denmark

Pinxten, M., Saunders-Smiths, G.N., Langie, G., (2018). *“Comparison of first-year student conceptions on their future roles as engineers between Belgium and The Netherlands”*. 46th SEFI Annual Conference, 17-21 Sep 2018, Copenhagen, Denmark

Schuurman, M.J., Saunders-Smiths, G.N., and Rans, C.D., (2018). *“Increasing Bloom’s Hierarchical Learning in Aerospace Engineering – a Case Study of Forensic Engineering Course using a ‘Chain of Events’ “*. 2018 Aviation Technology, Integration, and Operations Conference, Atlanta, Georgia, USA, DOI:10.2514/6.2018-3201

Saunders-Smiths, G.N., De Breuker, R., Rans, C.D., Schuurman, M.J, and van Staalduinen, J.P., (2018). *“A paradigm shift in teaching Aerospace Engineering: from campus learners to professional learners – a case study on online courses in Smart Structures and Air Safety Investigation”*, AIAA Aerospace Sciences Meeting, 8-12 Jan 2018, Kissimmee, Florida, USA. DOI:10.2514/6.2018-0810

2017

Leandro Cruz, M., and Saunders-Smiths, G.N., (2017). *“Comparison of Transversal Competence Levels of Engineering Students with Labour Market Requirements. Time for Change”* – 5th Annual Symposium of the United Kingdom & Ireland Engineering Education Research Network, 23-24 Nov 2017, London, United Kingdom

Craps, S., Pinxten, M., Saunders-Smiths, G.N., Leandro Cruz, M., Gaughan, K., and Langie, G., (2017). *“Professional Roles and Employability of Future Engineers”*. 45th SEFI Annual Conference, 18-21 Sep 2017, Azores, Portugal

2016

Saunders-Smiths, G.N., Schuurman, M.J., and Rans, C.D., (2016). *“Hands on Workshop on Teaching Forensic Engineering Teaching Students Critical Thinking by Investigative Mindset.”* 44th SEFI Annual Conference, 15 -19 Sep 2016, Tampere, Finland

Rans, C.D., Teixeira De Freitas, S., van Campen, J.J.M., and Saunders-Smiths, G.N., (2016). *“(Blended Learning)²: Blending content- and learning-oriented objectives in a blended learning environment”*, 44th SEFI Annual Conference, 15 - 19 Sep 2016, Tampere, Finland

2015

Saunders-Smiths, G.N., Schuurman, M.J., and Rans, C.D., (2015). *“Forensic Engineering: Learning by Accident Teaching Investigation Skills to Graduate Students using Real-Life Accident Simulations”*, 53rd AIAA Aerospace Sciences Meeting, Jan 2015, AIAA SciTech, Kissimmee, Florida, USA. DOI: 10.2514/6.2015-1516

Saunders-Smiths, G.N., and Mebus, L.F.M., (2015). *“Anytime, Anywhere – The development of an online course in Research Methodologies”*, 43rd Annual SEFI Conference, 29 Jun - 2 Jul 2015, Orleans, France.

2014

Saunders-Smiths, G.N., (2014). *“Design of an MSc Degree course in Aerospace Structures & Materials”*, 42nd SEFI Annual Conference, 15-19 Sep 2014, Birmingham, United Kingdom

2013

Groot Kormelink, J., Saunders-Smiths, G.N., and Dopper, S., (2013), *“From on-campus to online distance education: a three-dimensional perspective: International market, institutional policies and implementation”*, The Open and Flexible Higher Education Conference (EADTU2013), 23-25 Oct 2013, Paris, France

Saunders-Smiths, G.N., De Breuker, R., Mebus, L.F.M., and Hol, J.M.A.M.,(2013), *“The first steps towards an Online Master in Aerospace Engineering”*, 41st SEFI Annual Conference Engineering Education Fast Forward 1973-2013, 16 - 20 Sep. 2013, Leuven, Belgium

2012

Saunders-Smiths, G.N., Roling, P.C., Brügemann, V.P., Timmer, W.A., and Melkert, J.A., (2012), *“Using the Engineering Design Cycle to Develop Integrated Project Based Learning in Aerospace Engineering”*, EE2012 International Conference on Innovation, Practice, and Research in Engineering Education, 18-20 Sep. 2012, Coventry, United Kingdom

2011

Saunders-Smiths, G.N., and Melkert, J.A., (2011). *“Innovative Grading for Design Exercises”* 4th World Conference on Design, 31 Oct – 4 Nov 2011, IASDR, Delft, the Netherlands

Saunders-Smiths, G.N., (2011). *“Research Based Learning in a Project Based Learning Environment- A Case Study”*, 39th SEFI conference, SEFI & ISEL, 27-30 Sep 2011, Lisbon, Portugal – *Winner of Best Paper Award*

Saunders-Smiths, G.N., and Curran R., (2011). *“Designing their own Future: Teaching Students How to Design Aerospace Operations Research”*, 11th AIAA Aviation Technology, Integration, and Operations (ATIO) Conference, 20 - 22 Sep 2011, Virginia Beach, Virginia, USA. DOI: 10.2541/6.2011-6821

De Graaff, E., and Saunders-Smiths, G.N., (2011). *“Peer evaluation and Peer review to support PBL Teamwork”*, Second International Wireless Vehicle Technology, Information Theory and Aerospace & Electronic System Technology, 28 Feb – 3 Mar 2011, Chennai, India.
DOI: 10.1109/WIRELESSVITAE.2011.5940815

2009

Saunders-Smiths, G.N., Van den Bogaard, M.E.D., and Chiang, Y.C., (2009). *“Designing Training Sessions for TAs: Experiences in Aerospace Engineering at Delft University of Technology”*, 39th ASEE/IEEE Frontiers in Education Conference, San Antonio, Texas, USA.
DOI: 10.1109/FIE.2009.5350797

Saunders-Smiths, G.N., (2009). *“Engineering Heroes Wanted”*, 37th SEFI conference, SEFI & Delft University of Technology, 1-4 Jul 2009, Rotterdam, the Netherlands

De Kat, R., and Saunders-Smiths, G.N., (2009). *“3,2,1, Launch”*, 37th SEFI conference, SEFI & Delft University of Technology, 1-4 Jul 2009, Rotterdam, the Netherlands

De Breuker, R., Hol, J.M.A.M., and Saunders-Smiths, G.N., (2009), *“The use of Wiki-Pages as a Course Reader: Conclusions after a One-Year Wiki Experiment”*, 37th SEFI conference, SEFI & Delft University of Technology, 1-4 Jul 2009, Rotterdam, the Netherlands

2008

De Graaff, E., van den Bogaard, M.E.D., and Saunders-Smiths, G.N., (2008). *“Peer evaluation to enhance performance in project work”*, 37th International IGIP Symposium, Sep 2008, Moscow, Russia

De Breuker, R., Hol, J.M.A.M., Saunders-Smiths, G.N., and Van den Bogaard, M.E.D., (2008). *“GRASSROOTS: How to get lecturers to go digital? Advanced Use of BlackBoard for Online Testing in Aircraft Structural Design Courses”*, SEFI 36th Annual Conference, 2-5 Jul 2008, Aalborg, Denmark

Hol, J.M.A.M., de Breuker, R., Saunders-Smits, G.N., and Van den Bogaard, M.E.D., (2008). "GRASSROOTS: Social Software in education? Wikipedia to stay ahead in Aircraft Structural Analysis and Design courses", SEFI 36th Annual Conference, 2-5 Jul 2008, Aalborg, Denmark

2007

Van den Bogaard, M.E.D., and Saunders-Smits, G.N., (2007). "Peer & Self Evaluations as Means to Improve the Assessment of Project Based Learning", 37th ASEE/IEEE Annual Frontiers in Education Conference, Oct 2007, Milwaukee, Wisconsin. DOI:10.1109/FIE.2007.4417988

De Graaff, E., Van den Bogaard, M.E.D., and Saunders-Smits, G.N. (2007). "PEER Assessment and PEER review to support teamwork in engineering education", 6th ASEE Global Colloquium on Engineering Education, 1-4 Oct 2007, Istanbul, Turkey

Saunders-Smits, G.N., (2007). "EUREKA Active and integrated learning is important for professional success, so say our alumni!", 7th ALE International Workshop (pp. 353-360), 4-6 Jun 2007, INSA, Toulouse, France

Saunders-Smits, G.N., van den Bogaard, M.E.D., and de Graaff, E., (2007). "Team Building in International Design Projects", 7th ALE International Workshop (pp. 71-78), 4-6 Jun 2007, INSA, Toulouse, France

Saunders-Smits, G.N., (2007). "Looking Back – The Needs of an Aerospace Engineer in their Degree Course with the Benefit of Hindsight", SEFI and IGIP Joint Annual Conference 2007, 1-4 Jul 2007, Miskolc, Hungary.

Saunders-Smits, G.N., Roling, P.C., Melkert, J.A., Curran, R., Cooper, R., and Early, J., (2007). "Crossing Borders - 6 Years of International Aerospace Student Design Projects", SEFI and IGIP Joint Annual Conference 2007, 1-4 Jul 2007, Miskolc, Hungary

Hol, J.M.A.M., and Saunders-Smits, G.N., (2007). "A New Approach to Teaching Finite Element Analysis for Large Audiences", SEFI and IGIP Joint Annual Conference 2007, 1-4 Jul 2007, Miskolc, Hungary

2006

Andernach, T., and Saunders-Smits, G.N., (2006). "The use of Teaching – Assistants in Project-Based Learning at Aerospace Engineering", 36th ASEE/IEEE Annual Frontiers in Education Conference, 27-31 Oct 2006, San Diego, USA. DOI: 10.1109/FIE.2006.322468

2005

Saunders-Smits, G.N., and de Graaff, E., (2005). "Key Features in the Engineering Curriculum: What can we learn from Alumni Research", SEFI 2005 Annual Conference, 7 – 10 Sep 2005, Middle East Technical University, Ankara, Turkey, pp 522-528

Saunders-Smits, G.N., Gürdal, Z., and Hol, J.M.A.M., (2005). "Innovative Teaching of Aircraft Structural Analysis and Design Courses – Mathematica in an Engineering Education Environment", 2005 American Society for Engineering Education Annual Conference & Exposition, 12-15 Jun 2005, Portland, Oregon, USA. DOI: 10.18260/1-2--14177

Saunders-Smits, G.N., and de Vries, J., (2005). "Learning by doing: An innovative laboratory exercise to enhance the understanding of thin-walled Mechanics of Materials", 2005 American Society for Engineering Education Annual Conference & Exposition, 12-15 Jun 2005, Portland, Oregon, USA. DOI: 10.18260/1-2--15203

Saunders-Smits, G.N., (2005). "The Secret of their Success: What factors determine the career success of an aerospace engineer trained in the Netherlands?", 2005 American Society for Engineering Education Annual Conference & Exposition, 12-15 Jun 2005, Portland, Oregon, USA. DOI: 10.18260/1-2--15571

2003

Saunders-Smiths, G.N., and de Graaff, E., (2003). *“The development of integrated professional skills in Aerospace Engineering through problem-based learning in design projects”*, 2003 American Society for Engineering Education Annual Conference and Exposition, Jun 2003, Nashville, Tennessee, USA. DOI: 10.18260/1-2—12480

WEBINARS

“Neurodiversity – the inclusiveness vs. labelling paradox”, [webinar contribution](#) as Part of the SEFI@work webinar series: The experience of neurodiverse engineering students: support for success, 15 Mar 2023.

WORKSHOPS ENGINEERING EDUCATION

“Supporting Engineering Students with Disabilities: Promoting Awareness and Sharing Good Practices”, Workshop with Natalie Wint (UCL) and Roger Penlington (Northumbria University) at 51st Annual SEFI Conference, 10-14 Sep 2023, Dublin, Ireland.

“Using Peer Assessment in Inclusive Digital Education”, Workshop at LDE-CEL Annual event, Workshop with Gitte van Helden, Vivian van der Werf, and Marcus Specht, Delft, the Netherlands, 7 Dec 2022.

“Personal Branding in Academia”, Workshop for PhD students of the Leiden – Delft – Erasmus Centre for Education and Learning, The Hague, June 2022

“Using Peer Assessment in Inclusive Digital Education”, Workshop with Gitte van Helden, Vivian van der Werf, and Marcus Specht at 50th SEFI Annual Conference, 19-22 Sep 2022, Barcelona, Spain.

“Working with Peers in Education: Evaluation, Review and Assessment” Workshop for RAPIDE project, LDE-CEL Annual Event, 14 Dec 2021.

“What type of Engineer are you?” - Workshop BEST Delft, 29 Sep 2020.

“Wat voor type Ingenieur ben jij?” – KIVI Young Engineers, 28 Sep 2020.

“What type of Engineer are you?” - Workshop for Aerospace Structures and Materials Student Society Enlightness, 18 Jun 2020.

“What type of Engineer are you?” – European Young Engineers Online Conference, 9 May 2020.

“Transversal skills - How do we prepare our students for the future labour market?” workshop at TU Delft Teaching Lab, 26 Nov 2019.

“Inclusiveness of Neurodiverse Students in Engineering Education Curriculum Design and Delivery”, by Gillian Saunders-Smiths, TU Delft Education Day, Nov 2019.

“Inclusiveness of Neurodiverse Students in Engineering Education Curriculum Design and Delivery”, by Gillian Saunders-Smiths and Maartje E.D. van den Bogaard, SEFI Annual Conference, Budapest, Hungary, Sep 2019.

“Teaching other Communication Skills than Writing and Presenting – A Take Home Workshop created as part of the PREFER Project”, by Mariana Leandro Cruz and Gillian N. Saunders-Smiths, SEFI Annual Conference, Budapest, Hungary, Sep 2019.

“Protecting the Space for Large Scale Innovation”, Round Table Discussion, Prof. E. Lindsay, Prof. J. Mitchell, and Dr. G.N. Saunders-Smiths, 46th SEFI Annual Conference, Copenhagen, Denmark, Sep 2018.

“Hands on Workshop on Teaching Forensic Engineering: Teaching Students Critical Thinking by Investigative Mindset”, G.N. Saunders-Smiths, C.D. Rans, M.J. Schuurman, 44th Annual SEFI Conference of the European Society for Engineering Education, Tampere, Finland, Sep 2016.

Workshop on *the use of Peer Review in project education* at SURF Onderwijsdagen, Rotterdam in collaboration with Parantion, Nov 2012.